value cannot be estimated. Dr. Sajous has traced the vital processes of the body to the functions of the ductless glands, and believes that of these the "adrenal system" is pre-eminently important. The adrenal glands themselves are considered as the source of a secretion which with the oxygen of the air forms the "oxidizing substance" of the blood. In turn these organs are directly connected with the anterior pituitary body by means of the solar plexus, splanchnic nerves, and cervicothoracic ganglia, the pituitary body acting as a governing centre for the adrenal glands. The activity of the pituitary body is sustained by means of the thyroid gland secretion, which substance consists principally of iodine. The symptoms of infections and poisons are ascribed to the overactivity or insufficiency of "the adrenal system" brought on by the action of toxins upon the system. Therapeutical measures also owe their action and their value to the stimulation or depression of the adrenal system. But certain other groups of organs are considered of vital importance to the welfare of the organism. The posterior pituitary body is viewed as the chief functional centre of the nervous system, and to it is accorded the power of sustaining the cellular metabolism of all organs. The principal function of the pancreas and spleen lies in their production of a substance called "trypsin," which corresponds in a certain manner to the alexine of Buchner and the complement of Ehrlich. Answering to the immune body of Ehrlich is the "oxidizing substance," and this element, together with the trypsin and a third substance, the "fibrinogen," forms the immunizing or protecting bodies of the organism. Should one of these be absent or decreased the power of combating toxins is greatly injured. The author holds, further, that the leucocytes are of the utmost importance in carrying out certain metabolic processes and are themselves the purveyors of the "trypsin." The relation which these various organs bear to the life and functions of the body is expanded in detail throughout the different chapters, and many important experiments made by various investigators are quoted at some length to elucidate questions as they arise. Several excellent colored plates and black and white illustrations are used to explain the text. The book numbers about 800 pages and is well indexed.

W. T. L.

CLINICAL TREATISES ON THE PATHOLOGY AND THERAPY OF DISORDERS OF METABOLISM AND NUTRITION. By DR. CARL VON NOORDEN. Part III. Membranous Catarrh of the Intestines. New York: E. B. Treat & Co., 1903.

THIS monograph has been added to the series of clinical treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition, the American editions of which are translated under the direction of Boardman Reed, M.D.

This little book, after expressing the various views as to the pathology of colica mucosa, presents Prof. von Noorden's theory of the disease, which he speaks of as a symptom-complex. The position is taken that, although colica mucosa may complicate enteritis, it is not dependent upon any anatomical change in the mucosa, but is due to certain nervous influences which produce excessive irritability of the large intestine with overactivity of those glands that secrete mucus.

More than half the book is devoted to treatment. First the symptomatic and then the causal treatment on broad principles is thoroughly discussed. Diet regulations play the largest part, and Prof. von Noorden, assuming that the cure of colica mucosa presupposes a cure of the constipation which almost always precedes it, advises a system of feeding that is not directed to sparing the digestive organs, but that shall leave a coarse residue of such nature that the stools will be large and soft. He indicates the general lines to be followed in order to attain this result, and, even against his inclination, gives special lists. Such method of treatment, combined with measures to restore tone and balance to the nervous system, he believes, brings the quickest and most permanent cure. He calls his method a dietetic-exercise-treatment in contradistinction to the usual protective treatment. At the end of the book he presents a review of the cases treated in this manner. The book is a well-written and interesting contribution to the series. H. L. C.

A MANUAL OF BACTERIOLOGY. By ROBERT MUIR, M.D., and JAMES RITCHIE, M.D. American edition, with additions by NORMAN MACLEOD HARRIS, M.D. Illustrated. New York: The Macmillan Co., 1903.

THIS American edition of an English manual of such recognized value has given adequate expression to the researches of this country without in any way detracting from the original ideas of its authors. It is unquestionably the most trustworthy presentation of the subject in our language, presenting a comprehensive survey of the entire subject in its most modern aspects. The general morphology and biology of bacteria are first considered, and this is followed by descriptions of the cultivation of bacteria, technical methods of diagnosis, and animal inoculation. A chapter on the distribution of bacteria in air, soil, and water closes the more general section of the book. A chapter on the "Relations of Bacteria to Disease" introduces the subject of the individual species of bacteria causative of morbid processes, which naturally forms the bulk of the book. The treatment is one of pathological entities rather than the more biological grouping of the bacteria of allied species. Simple inflammatory suppurative conditions are first dealt with. In order follow gonorrhœa, soft sore, syphilis, tuberculosis, leprosy, glanders, and actinomycosis. Typhoid fever and its causative is considered in connection with allied organisms causative of paracolon infection and dysentery. Diphtheria, tetanus, and cholera are followed by influenza, plague, malta fever, and yellow fever. In connection with the latter disease the rather full treatment of the B. icteroides of Sanarelli may be criticised, since the probably parasitic nature of the disease, as shown by the researches of Reed and Carroll, although fully stated, is secondarily placed.

The concluding chapters on the general facts of active and passive immunity, together with an exposition of the more recent theories of Ehrlich and Metchnikoff, are most readable and interesting. Several appendices deal with smallpox, hydrophobia, malaria, and amœbic dysentery. A full bibliography completes the volume. The illustrations are sufficient and the general presentation pleasing. F. P. G.